

ABSTRACT OF THE DISCLOSURE

An environmentally friendly (ECF), yet commercially viable, process produces fully bleached (typically having a brightness of over 89 or 90% ISO) cellulose pulp using a (ZEND) treatment. Typically pulp is produced in an essentially sulphur-free pulping process (such as an soda/AQ process), and is then treated by a D-E_O⁻, D-E_P⁻, or D-E_{OP}⁻ sequence before the (ZEND) treatment. Optional oxygen delignification may also be used, and subsequent elemental-chlorine-free bleaching sequences may also be employed, although normally not necessary since the pulp after the (ZEND) treatment has high brightness and good viscosity (e.g. over 21 cP).